



 INFORMATION OFFICE DISCLOSURE STATEMENT BY APPLICANT				<i>Complete if Known</i>	
				Application Number	10/696,708
				Filing Date	30 October 2003
				First Named Inventor	Mark T. KEATING et al.
				Group Art Unit	1636
				Examiner Name	
Sheet	1	of	4	Attorney Docket Number	2323-164

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹¹Inquire citation designation number. ¹²See attached Kinds of U.S. Patent Documents. ¹³Enter Office that issued the document, by the two-letter code.

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind Unique citation designation number. *See attached Kinds of U.S. Patent Documents. *Enter Office that issued the document, by the two-letter code.

*For Japanese patent documents, the indication of the year or the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Applicant is to place a check mark here if English language translation is attached. AB indicates that only an English language abstract is attached.

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
CQ	AB	Ackerman, M.J., M.D., Ph.D., "The Long QT Syndrome: Ion Channel Diseases of the Heart", <i>Mayo Clin. Proc.</i> 1998; 73:250-269	
	AC	Akimoto, K., et al., "Novel Missense Mutation (G601S) of HERG in a Japanese Long QT Syndrome Family", <i>HUMAN MUTATION Supplement</i> 1998; 1:S184-S186	
	AD	Babij, P., et al., "Inhibition of Cardiac Delayed Rectifier K ⁺ Current by Overexpression of the Long-QT Syndrome HERG G628S Mutation in Transgenic Mice", <i>Circ. Res.</i> 1998; 83(6):668-678	
	AE	Benson, D., et al., "Missense Mutation in the Pore Region of HERG Causes Familial Long QT Syndrome", <i>Circulation</i> May 15, 1996; 93(10):1791-1795	
	AF	Curran, M., et al., "A Molecular Basis for Cardiac Arrhythmia: HERG Mutations Cause Long QT Syndrome", <i>Cell</i> March 10, 1995; 80:795-803	
	AG	Dausse, E., et al., "A mutation in HERG Associated with Notched T Waves in Long QT Syndrome", <i>J. Mol. Cell Cardiol.</i> 1996; 28:1609-1615	
	AH	Fung, D., et al., "Rsal and Mael intragenic RFLPs in the human HERG gene", <i>Clin. Genet.</i> 1998; 53:504	
	AI	Itoh, T., et al., "Genomic organization and mutational analysis of HERG, a gene responsible for familial long QT syndrome", <i>Hum. Genet.</i> 1998; 103:290-294	
	BA	Janse, M.J. and Wilde, A.A.M., "Molecular Mechanisms of Arrhythmias", <i>Rev. Port. Cardiol.</i> 1998; 17(Supl. II):41-46	
	BB	Jiang, C., et al., "Two long QT syndrome loci map to chromosomes 3 and 7 with evidence for further heterogeneity", <i>Nature Genetics</i> October 1994; 8:141-147	
	BC	Keating, M.T., MD, "Genetic Approaches to Cardiovascular Disease Supravalvular Aortic Stenosis, Williams Syndrome, and Long-QT Syndrome", <i>Circulation</i> 1995; 92(1):142-147	
	BD	Keating, M.T., "The Long QT Syndrome A Review of Recent Molecular Genetic and Physiologic Discoveries", <i>Medicine</i> 1996; 75(1):1-5	
	BE	Kupershmidt, S., et al., "A K ⁺ Channel Splice Variant Common in Human Heart Lacks a C-terminal Domain Required for Expression of Rapidly Activating Delayed Rectifier Current", <i>J. Biol. Chem.</i> Oct. 16, 1998 273(42):27231-27235	
✓	BF	Lazzara, R., "Mechanisms and management of congenital and acquired long QT syndromes", <i>Arch. Mal. Coeur Vass.</i> 1996; 89 (Spec. No. 1)51-55	

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CQ	BH	Locati, E.H., et al., "Age- and Sex-Related Differences in Clinical Manifestations in Patients With Congenital Long-QT Syndrome", <i>Circulation</i> June 9, 1998; 97(22):2237-2244	
	BI	London, B., et al., "Two Isoforms of the Mouse Ether-a-go-go-Related Gene Coassemble to Form Channels With Properties Similar to the Rapidly Activating Component of the Cardiac Delayed Rectifier K ⁺ Current", <i>Circ. Res.</i> Nov. 1997; 81(5):870-878	
	BJ	McDonald, T., et al., "A minK-HERG complex regulates the cardiac potassium current I _{Kr} ", <i>Nature</i> July 17, 1997; 388:289-292	
	BK	Roden, D.M., et al., "Multiple Mechanisms in the Long-QT Syndrome", <i>Circulation</i> 1996; 94(8):1996-2012	
	CA	Roden, D.M., et al., "Recent Advances in Understanding the Molecular Mechanisms of the Long QT Syndrome", <i>J. Cardiovasc. Electrophysiol.</i> Nov. 1995; 6(11):1023-1031	
	CB	Sanguinetti, M.C., et al., "A Mechanistic Link between an Inherited and an Acquired Cardiac Arrhythmia: HERG Encodes the I _{Kr} Potassium Channel", <i>Cell</i> April 21, 1995; 81:299-307	
	CC	Satler, C., et al., "Multiple different missense mutations in the pore region of HERG in patients with long QT syndrome", <i>Hum. Genet.</i> 1998; 102:265-272	
	CD	Satler, C., et al., "Novel Missense Mutation in the Cyclic Nucleotide-Binding Domain of HERG Causes Long QT Syndrome", <i>American Journal of Medical Genetics</i> 1996; 65:27-35	
	CE	Schönherz, R., et al., "Molecular determinants for activation and inactivation of HERG, a human inward rectifier potassium channel", <i>Journal of Physiology</i> 1996; 493.3:635-642	
	CF	Schulze-Bahr, E., et al., "Autosomal recessive long-QT syndrome (Jervell Lange-Nielsen syndrome) is genetically heterogeneous", <i>Hum. Genet.</i> 1997; 100:573-576	
	CG	Schwartz, P., et al., "Long QT Syndrome Patients With Mutations of the SCN5A and HERG Genes Have Differential Responses to Na ⁺ Channel Blockade and to Increases in Heart Rate", <i>Circulation</i> Dec. 15, 1995; 92(12):3381-3386	
	CH	Splawski, I., et al., "Genomic Structure of Three Long QT Syndrome Genes: KVLQT1, HERG and KCNE1", <i>Genomics</i> 1998; 51:86-97	
	CI	Tanaka, T., et al., "Four Novel KVLQT1 and Four Novel HERG Mutations in Familial Long-QT Syndrome", <i>Circulation</i> Feb. 4, 1997; 95(3):565-567	
✓	CJ	Trudeau, M., et al., "HERG, a Human Inward Rectifier in the Voltage-Gated Potassium Channel Family", <i>Science</i> July 7, 1995; 269:92-95, 1087	

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CR	CK	Vincent, G.M. MD, "The Molecular Genetics of The Long QT Syndrome: Genes Causing Fainting and Sudden Death", <i>Annu. Rev. Med.</i> 1998; 49:263-74	
	CL	van den Berg, M., et al., "The long QT syndrome: a novel missense mutation in the S6 region of the KVLQT1 gene", <i>Hum. Genet.</i> 1997; 100:356-361	
	DA	Wang, Q., et al., "Genetics, molecular mechanisms and management of long QT syndrome", <i>Ann. Med.</i> 1998; 30:58-65	
	DB	Wang, Q., et al., "The molecular basis of long QT syndrome and prospects for therapy", <i>Mol. Med. Today</i> Sept. 1998; 4(9):382-388	
	DC	Wang, Q., et al., "Molecular genetics of long QT syndrome from genes to patients", <i>Curr. Opin. Cardiol.</i> 1997; 12:310-320	
	DE	Warmke, J.W. et al., "A family of potassium channel genes related to eag in <i>Drosophila</i> and mammals" <i>Proc. Natl. Acad. Sci. USA</i> 91:3439-3442 (1994)	
	DF	Wattanasirichaigoon, D. and Beggs, A.H., "Molecular genetics of long-QT syndrome", <i>Curr. Opin. Pediatr.</i> 1998; 10:628-634	
	DG	Zareba, W., et al., "Influence of the Genotype on the Clinical Course of the Long-QT Syndrome", <i>N. Eng. J. Med.</i> Oct. 1998; 339(14):960-965	
	DH	Zhou, Z., et al., "HERG Channel Dysfunction in Human Long QT Syndrome", <i>J. Biol. Chem.</i> Aug. 14, 1998; 273(33):21061-21066	
	DI	Zou, A., et al., "A mutation in the pore region of HERG K ⁺ channels expressed in <i>Xenopus</i> oocytes reduces rectification by shifting the voltage dependence of inactivation", <i>Journal of Physiology</i> , 1998; 509.1:129-137	
↓	DJ	OMIM ENTRY 152427 - LONG QT SYNDROME, TYPE 2; LQT2 7pp.	
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